

PATENT
IBM Docket No. GB9-1999-0123US1

Changes to the Specification

Please rewrite the paragraph beginning at page 6, line 6, to read as follows:

“Also the invention provides a client computer which calculates a new security code from a seed value, advance function and hash function supplied to it by a server computer and returns the new security code to the server for comparison with a server calculated version.”

Please rewrite the paragraph beginning at page 9, line 10, to read as follows:

“Communication over the Internet for the transfer of information, including the making of on-line purchases, involves a client device, running an application known as a browser, communicating with a remote server which provides the required information or executes the purchase transaction. While much Internet traffic is still generated by desktop or laptop computers, connected by modem and carried over the conventional telecommunications network, there is increasing interest in the use of mobile phones or personal digital assistants (PDAs), also known as palmtop devices, for Internet communications.”

Please rewrite the paragraph beginning at page 9, line 23, to read as follows:

“Mobile phones and some PDAs use wireless telecommunication over a cellular network, as illustrated in Figure 1. Sometimes, special communication protocols, for example, WAP (Wireless Application Protocol), are used to facilitate the use of this type of device with the Internet. In Figure 1, a mobile WAP and a palmtop PDA 20 are clients connected wirelessly to a data server 30, via the Internet. When one of the clients wishes to communicate with the server, a communications session must be established over the physical link. In a secure environment, an authentication protocol must be followed in which the two parties engage in a lengthy and expensive exchange of information to establish each other's identity. As already indicated, there are numerous known methods for accomplishing this mutual authentication, which are either based on securely exchanged private keys or on non-communicated private key and exchanged

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public key information in combination with public key infrastructures. Accordingly, each of the devices in Figure 1 is provided with its own security protocol software 11, 21 and 31, respectively, to control secure communication between the client devices, 10 and 20, and the server 30."